

Application No. 10/786,186
Supplemental Amendment "B" dated April 5, 2006
Reply to Office Action of December 23, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A suture separation and organization device for use in reliably maintaining a plurality of tensioned suture strands in a desired spaced-apart relationship on either side of a bone tunnel ~~a graft tensioning system~~ during joint repair surgery in order to facilitate insertion of an interference screw between the tensioned strands and into the bone tunnel, the device comprising:

body means, comprised of at least one body having a proximal side and a distal side, for providing a structure for the suture separation and organization device;

means for removably attaching said body means to a graft tensioning device;

means, positioned on the proximal side of said body, for separating and organizing a plurality of tensioned suture strands extending away from a bone tunnel and reliably maintaining the tensioned suture strands in a desired spaced-apart orientation on either side of the bone tunnel when said body means is attached to a graft tensioning device during joint repair surgery in order that such tensioned suture strands do not inadvertently slip out and move towards each other so as to block insertion of an interference screw therebetween; and

a passageway or recess, disposed on either the distal side of said body or between the proximal and distal sides of said body so ~~as to be~~ that the passageway or recess is distally offset relative to said means for separating and organizing a plurality of suture strands, through which an interference screw can be inserted during joint repair surgery.

2. (Original) A suture separation and organization device as defined in claim 1, said body means comprising a first elongate body comprising a gripping head at one end and a chiseled end opposite said gripping head that facilitates insertion of said first elongate body between two or more suture strands.

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3. (Original) A suture separation and organization device as defined in claim 2, said means for removably attaching said body means to a graft tensioning device comprising a plurality of attachment passages or recesses in said elongate body, each being sized and positioned so as to at least partially receive therein a corresponding post of a graft tensioning device.

4. (Original) A suture separation and organization device as defined in claim 2, said means for separating and organizing a plurality of suture strands comprising first and second suture retention recesses or protrusions in said elongate body adapted to retain first and second suture strands or groups of suture strands extending away from a bone tunnel in said desired spaced-apart orientation.

5. (Original) A suture separation and organization device as defined in claim 2, said body means further comprising a second elongate body similar or identical to, but separate from, said first elongate body, said first and second elongate bodies, when used in tandem, being adapted to separate and organize four suture strands or groups of suture strands into four spaced-apart quadrants.

6. (Original) A suture separation and organization device as defined in claim 5, said first and second elongate bodies each including a recess that forms part of said passageway or recess in said body means through which an interference screw can be inserted during joint repair surgery.

7. (Original) A suture separation and organization device as defined in claim 1, said body means comprising a body having a first surface that is oriented toward a graft tensioning device when in use and a second surface that is oriented toward a bone tunnel in a patient's leg when in use.

8. (Previously Presented) A suture separation and organization device as defined in claim 7, said first surface of said body being substantially flat.

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9. (Original) A suture separation and organization device as defined in claim 7, said means for removably attaching said body means to a graft tensioning device comprising a plurality of attachment passages or recesses in said body, each being sized and positioned so as to at least partially receive therein a corresponding post of a graft tensioning device.

10. (Original) A suture separation and organization device as defined in claim 9, each of said attachment passages or recesses being defined by a respective hollow post guide extending laterally from said second surface of said body so as to maintain space between a patient's leg and said second surface of said body when said suture separation and organization device is in use.

11. (Original) A suture separation and organization device as defined in claim 7, said means for separating and organizing a plurality of suture strands comprising a plurality of suture retention recesses or protrusions disposed on a perimeter of said body and adapted to retain corresponding suture strands or group of suture strands extending away from a bone tunnel in said desired spaced-apart orientation.

12. (Original) A suture separation and organization device as defined in claim 10, said means for separating and organizing a plurality of suture strands comprising four suture retention recesses or protrusions being positioned so as to separate and organize four suture strands or groups of suture strands into four spaced-apart quadrants.

13. (Original) A tensioning system for use in joint repair surgery, comprising:
a suture separation and organization device according to claim 1; and
a graft tensioning device configured so as to apply a desired tensile load to one or more soft tissue grafts emerging from a bone tunnel in a patient's limb and attached to a plurality of suture strands the extend away from the bone tunnel.

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14. (Currently Amended) A suture separation and organization device for use in reliably maintaining a plurality of tensioned suture strands in a desired spaced-apart relationship on either side of a bone tunnel ~~a graft tensioning system during joint repair surgery in order to facilitate insertion of an interference screw between the tensioned strands and into the bone tunnel, the device comprising:~~

a body having a proximal side and a distal side;

a plurality of attachment passages or recesses in the proximal side of said body, each being sized and positioned so as to at least partially receive therein a corresponding post of a graft tensioning device, each attachment passage or recess having a size and shape so as to reliably mate with the corresponding post of a graft tensioning device so as to reliably hold the body from inadvertently slipping off the graft tensioning device when the device is used to separate tensioned sutures during use;

a plurality of spaced-apart suture retention recesses or protrusions disposed on a the distal side of said body and adapted to reliably retain a plurality of tensioned suture strands or groups of tensioned suture strands extending away from a bone tunnel in a desired spaced-apart orientation on either side of the bone tunnel when said body is attached to a graft tensioning device during joint repair surgery in order that such tensioned suture strands do not inadvertently slip out and move towards each other so as to block insertion of an interference screw therebetween; and

a passageway or recess in the proximal side of said body through which an interference screw can be inserted during joint repair surgery.

15. (Original) A suture separation and organization device as defined in claim 14, said body comprising an elongate body having a gripping head at one end and a chiseled end opposite said gripping head that facilitates insertion of said elongate body between two or more suture strands.

16. (Original) A suture separation and organization device as defined in claim 14, said body having a first surface that is oriented toward a graft tensioning device when in use and a second surface that is oriented toward a bone tunnel in a patient's leg when in use.

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17. (Original) A suture separation and organization device as defined in claim 16, each of said attachment passages or recesses being defined by a respective hollow post guide extending laterally from said second surface of said body so as to maintain space between a patient's leg and said second surface of said body when said suture separation and organization device is in use.

18. (Cancelled)

19. (Cancelled)

20. (Previously Presented) A tensioning system for use in joint repair surgery, comprising:

a suture separation and organization device according to claim 14; and

a graft tensioning device configured so as to apply a desired tensile load to one or more soft tissue grafts emerging from a bone tunnel in a patient's limb and attached to a plurality of suture strands the extend away from the bone tunnel.

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

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25. (Currently Amended) A suture separation and organization device configured to be attached to a tensioning device for applying a desired tensile load to one or more soft tissue grafts extending from a bone tunnel of a patient during joint repair surgery, the suture separation and organization device comprising:

a body having a proximal side and a distal side;

a first pair of suture retention recesses or protrusions disposed on a proximal side of said body and adapted to reliably retain a first plurality of tensioned suture strands or groups of tensioned suture strands extending away from a bone tunnel in a desired spaced-apart orientation on either side of the bone tunnel when said body is attached to a graft tensioning device during joint repair surgery in order that such tensioned suture strands do not inadvertently slip out and move towards each other so as to block insertion of an interference screw therebetween;

a second pair of suture retention recesses or protrusions disposed on a distal side of said body and adapted to reliably retain a second plurality of tensioned suture strands or groups of tensioned suture strands extending away from a bone tunnel in a desired spaced-apart orientation on either side of the bone tunnel when said body is attached to a graft tensioning device during joint repair surgery in order that such tensioned suture strands do not inadvertently slip out and move towards each other so as to block insertion of an interference screw therebetween; and

a passageway or recess, positioned between said proximal and distal sides of said body, through which an interference screw can be inserted during joint repair surgery.

26. (Previously Presented) A suture separation and organization device as in claim 25, each of the plurality of suture retention recesses or protrusions defining an opening having a width that is smaller than a width of the passageway or recess.

27. (Previously Presented) A suture separation and organization device as defined in claim 25, said means for separating and organizing a plurality of suture strands comprising four suture retention recesses or protrusions being positioned so as to separate and organize four suture strands or groups of suture strands into four spaced-apart quadrants.

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28. (Previously Presented) A tensioning system for use in joint repair surgery, comprising:

a suture separation and organization device according to claim 25; and

a graft tensioning device configured so as to apply a desired tensile load to one or more soft tissue grafts emerging from a bone tunnel in a patient's limb and attached to a plurality of suture strands that extend away from the bone tunnel.